

**METHOD AND APPARATUS FOR ADAPTIVE AND ONLINE ASSIGNMENT IN
HIERARCHICAL OVERLAY NETWORKS****ABSTRACT**

5 A method and apparatus is disclosed for calculating a threshold used to
assign a data transmission from a user to one layer in a plurality of layers in a
wireless communications network. A balancing metric is calculated for one
layer in the network as a function of a characteristic of the user's data
transmission. This balancing metric is then calculated for a second layer in the
10 network, also as a function of the characteristic of the user's transmission. A
threshold is then adjusted in response to the value of the first balancing metric
relative to the second balancing metric. Data users are then assigned to a layer
in the network based on a comparison of the threshold to the value of the
characteristic for that user.